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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/344,735	06/25/1999	HERMAN BERG	GENE1110-1	9401

35938 7590 12/01/2003

BIOTECHNOLOGY LAW GROUP
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EXAMINER

WILLIAMS, CATHERINE SERKE

ART UNIT	PAPER NUMBER
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3763

DATE MAILED: 12/01/2003

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/344,735

Applicant(s)

BERG ET AL.

Examiner

Catherine S. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 13-18, 23, 24, 26-40, 42, 44, 45, 52-57, 62, 63 and 65-68 is/are pending in the application.
- 4a) Of the above claim(s) 55 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 13-18, 23, 24, 26-28, 31-33, 35-39, 42, 44, 45, 52-57, 62, 63 and 65-67 is/are rejected.
- 7) ☒ Claim(s) 29, 30, 34, 40 and 68 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

The indicated allowability is withdrawn in view of the newly discovered reference(s).

Rejections based on the newly cited reference(s) follow.

Additionally, claim 55 was not elected in either the response to the restriction requirement received on 1/16/02 or the one on 4/1/03. Therefore, the claim is currently withdrawn since this claim was never officially cancelled by applicant.

Additionally, claim 30 (indicated as cancelled) has not been officially cancelled by any amendment. The examiner requests that applicant either officially cancel the claim or indicate that it is still pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5, 13-14, 17-18, 23-24, 26, 32-33, 36-39, 42, 44-45, 52-53, 56-57, 62-63 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by Walker et al (6,041,252). Walker discloses a drug delivery system that includes a method for drug delivery to a specific target in the human body combined with photodynamic therapy. The method teaches providing a photooxidizing agent, applying an electric pulse to electroporate a cell with the photooxidizing agent, and applying a light (laser) to the cell (after electroporation). See 3:16-21 and 38:26-36.

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Multiple electric pulses are applied (7:16) by a plurality of electrodes (8:3). See also 7:4+ for amplitude and duration. The wavelength of the light is 630nm (see 38:33). The reference also teaches a method of heating the cell. See 39:55+. The photooxidizing agent can be hematoporphyrin.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27-28 and 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. Walker meets the claim limitations as described above but fails to include a cytostatic agent specifically daunomycin, adriamycin or actinomycin.

At the time of the invention, it would have been obvious to substitute any of the above cytostatic agents for the hematoporphyrin of Walker since they are equivalent in the art. Any of the above cytostatic agents would equally perform the same function, therefore the substitution would have been proper. Additionally, the motivation for the incorporation would have been in order to utilize a readily available agent in the method.

Claim 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. Walker meets the claim limitations as described above but fails to include a meander electrodes. At the time of the invention, it would have been obvious to substitute meander electrodes into the

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invention of Walker. The meander electrodes would equally perform the same function, therefore the substitution would have been proper. Additionally, the motivation for the incorporation would have been in order to utilize a readily available electrode in the method.

Claims 15-16, 31 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al in view of Kennedy et al (US Pat# 5,079,262). Walker meets the claim limitations as described above but fails to include using a tungsten lamp or protoporphyrin IX.

However, Kennedy discloses a method of photodynamic therapy that includes using a tungsten lamp and protoporphyrin IX. At the time of the invention, it would have been obvious to substitute the tungsten lamp of Kennedy for the laser and agent of Walker. Both methods are analogous in the art and therefore a combination is proper. Additionally, the tungsten lamp and protoporphyrin IX of Kennedy would perform the same function just as well as that disclosed by Walker. The motivation for the incorporation would have been in order to use a readily available agent and light source in the method.

Allowable Subject Matter

Claims 29, 34, 40 and 68

are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine S. Williams whose telephone number is 703-308-4846. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 703-308-3552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2192.

Catherine S. Williams *CSW*.
November 25, 2003

*Shaul
F. Thant
Primary Examiner*